

(H<sub>2</sub>S) or in zones where the presence of H<sub>2</sub>S is unknown, as defined in § 250.67 of this part, shall be conducted in accordance with that section and other relevant requirements of subpart H, Production Safety Systems.

### Subpart I—Platforms and Structures

#### § 250.130 General requirements.

(a) The lessee shall design, fabricate, install, use, inspect, and maintain all platforms and structures (platforms) on the Outer Continental Shelf (OCS) to assure their structural integrity for the safe conduct of drilling, workover, and production operations, considering the specific environmental conditions at the platform location.

(b) All new fixed or bottom-founded platforms (i.e., platforms or other structures, e.g., single-well caissons, artificial islands), shall be designed, fabricated, installed, inspected, and maintained in accordance with all the requirements of this section and §§ 250.131 and 250.134 through 250.144 of this subpart. Applications submitted pursuant to § 250.131 shall require the approval by the Regional Supervisor prior to platform installation.

(c) All new platforms which meet any of the conditions listed below shall be subject to the Platform Verification Program and shall be designed, fabricated, and installed in accordance with the requirements of §§ 250.131 through 250.144 of this part.

(1) Platforms installed in water depths exceeding 400 feet,

(2) Platforms having natural periods in excess of 3 seconds,

(3) Platforms installed in areas of unstable bottom conditions,

(4) Platforms having configurations and designs which have not previously been used or proven for use in the area, or

(5) Platforms installed in seismically active areas.

(d) Major modification to any platform shall be subject to the requirements of this subpart and shall require the approval of the Regional Supervisor. Major modification means any structural changes which materially alter the approved plan or causes a

major deviation from approved operations.

(e)(1) Major repairs of damage to any platform shall require the prior approval of the Regional Supervisor. Major repairs of damage means corrective operations involving structural members affecting the structural integrity of a portion or all of the platform.

(2) Under emergency conditions, repairs to primary structural elements may be made to restore an existing permitted condition without prior approval. The Regional Supervisor shall be notified within 24 hours of the damage that occurred and repairs that were made. The Regional Supervisor's approval for repairs shall be obtained.

(f) The requirements for an application for approval for the reuse or conversion of the use of an existing fixed or mobile platforms shall be determined on a case-by-case basis. An application shall be submitted to the Regional Supervisor for approval and shall include location, intended use, and demonstrate the adequacy of the design and structural condition of the platform.

(g) In addition to the requirements of this subpart, platform design, fabrication, and installation shall conform to API RP 2A, Recommended Practice For Planning, Designing, And Constructing Fixed Offshore Platforms, or American Concrete Institute (ACI) 357R, Guide for the Design and Construction of Fixed Offshore Concrete Structures, as appropriate. Alternative codes or rules may be utilized with approval of the Regional Supervisor. The requirements contained in these documents (API RP 2A and ACI 357R) are incorporated herein insofar as they do not conflict with other provisions of this subpart.

#### § 250.131 Application for approval.

(a) All applications under the provisions of this subpart shall be submitted to the Regional Supervisor for approval. All significant changes or modifications to approved applications shall be submitted to the Regional Supervisor for approval.

(b) Applications for all new platforms or major modifications shall be submitted in triplicate and shall contain the following information:

(1) General platform information including the following:

(i) The platform designation, lease number, area name, and block number;

(ii) Longitude and latitude coordinates, Universal Transverse Mercator grid-system coordinates, state plane coordinates in the Lambert or Transverse Mercator Projection system, and a plat drawn to a scale of 1 inch = 2,000 feet showing surface location of the platform and distance from the nearest block lines;

(iii) Drawings, plats, front and side elevations of the entire platform, and plan views that clearly illustrate essential parts, i.e., number and location of well slots, design loadings of each deck, water depth, nominal size and thickness of all primary load-bearing jacket and deck structural members, and nominal size, makeup, thickness, and design penetration of piling;

(iv) Corrosion protection or durability details which consist of the corrosion-protection method; expected life; and durability criteria for the submerged, splash, and atmospheric zones; and

(v) In the Alaska OCS Region, the following additional information shall be submitted:

(A) Slope protection and berm elevation for manmade islands,

(B) Wall thickness with size and placement of major steel reinforcement for concrete-gravity structures,

(C) Shell thickness with size and location of major reinforcement members for steel-gravity structures, and

(D) A plan for periodic inspections of the installed platforms in accordance with § 250.142 of this part.

(2) A summary of environmental data, as addressed in § 250.134 of this part, which has a bearing on the platform's design, installation, and operation, e.g., wave heights and periods, current, vertical distribution of wind and gust velocities, water depth, storm and astronomical tide data, marine growth, snow and ice effects, and air and sea temperatures;

(3) Foundation information including the following:

(i) A geotechnical investigation report containing a brief summary of the major strata encountered at the location by bore holes presented in tabular

form, a detailed subsurface profile illustrating results of field and laboratory testing, a listing of field and laboratory investigations and tests with a basic summary of resultant determinations, the identification of properties and conditions of the seabed and the subsoil, and the identification of any manmade hazards or obstructions;

(ii) A description of the effect of the environmental and functional loads on the foundation;

(iii) A determination, with supporting information, of the susceptibility of the area to soil movement and, if susceptible, an analysis of slope and soil stability;

(iv) A summary of the foundation design criteria as specified in § 250.139 of this part; and

(v) A summary of the seafloor survey results specified in § 250.139(b)(2) of this part.

(4) Structural information including the following:

(i) The design life of the platform and the basis for such determination.

(ii) A summary description of the design load conditions and design load combinations, taking into consideration the worst environmental and operational conditions anticipated over the service life of the platform.

(iii) A listing and description of the appropriate material specifications.

(iv) A description of the design methodologies, e.g., elastic, inelastic, and ultimate strength, used in design of the platform.

(v) A summary of pertinent derived factors of safety against failure for major structural members, e.g., unity check ratios exceeding 0.85 for steel-jacket platform members, indicated on "line" sketches of jacket sections.

(vi)(A) In the Alaska, Atlantic, and Pacific OCS Regions, a summary of the fatigue analysis as specified in §§ 250.135 through 250.139 of this part. The specific requirements for a fatigue analysis shall be determined by the Regional Supervisor on a case-by-case basis to determine the adequacy of the design and to assure the structural integrity of the platform.

(B) In the Gulf of Mexico OCS Region, a summary of the fatigue analysis as specified in §§ 250.135 through 250.139 of this part. A fatigue analysis

shall be performed for each steel template, pile-supported platform with natural periods greater than 3 seconds, and for each platform to be fabricated of high-strength steel (i.e., over 50 thousand pounds per square inch minimum yield) where components of high-strength steel are subjected to cyclic loading. The specific requirements for a fatigue analysis for other platforms shall be determined by the Regional Supervisor on a case-by-case basis to determine adequacy of the design and to assure the structural integrity of the platform.

(c) The information shall be submitted with or subsequent to the submittal of an Exploration Plan or Development and Production Plan. Additional detailed data and information may be required by the Regional Supervisor when needed to determine the adequacy of the design.

(d) The lessee shall have detailed structural plans as called for in paragraph (b)(1)(iii) of this section and specifications for new platforms or other structures and major modifications certified by a registered professional structural engineer or civil engineer specializing in structural design. The lessee shall also sign, date, and submit the following certification: Lessee certifies that the design of the structure/modification has been certified by a registered professional structural or a civil engineer specializing in structural design, and the structure/modification will be fabricated, installed, and maintained as described in the application and any approved modification thereto. Certified design and as built plans and specifications will be on file at——.

(e) The lessee shall notify the Regional Supervisor at least 1 week prior to transporting the platform to the installation site.

**§ 250.132 Platform Verification Program requirements.**

(a) *Requirements.* These requirements apply to the design, fabrication, and installation of new, fixed, bottom-founded, pile-supported, or concrete-gravity platforms. The applicability of these requirements to other types of platforms shall be determined by the MMS on a case-by-case basis. For all new

platforms or major modifications which meet any of the conditions contained in § 250.130(c) of this part, the lessee shall submit the design, fabrication, and installation verification plans to the Regional Supervisor for approval in accordance with paragraph (b) of this section. The design plan shall be submitted with or subsequent to the submittal of an Exploration Plan or Development and Production Plan. The fabrication and installation plans shall be submitted and approval obtained before such operations are initiated.

(b) *Verification plan requirements.* (1) *General plan requirements.* Each verification plan shall be submitted in triplicate and include the following:

(i) A nomination of a Certified Verification Agent (CVA) who shall conduct specified reviews in accordance with § 250.133 of this part,

(ii) The CVA qualification statement consisting of the following:

(A) Previous experience in third-party verification or experience in the design, fabrication, and/or installation of offshore oil and gas platforms, man-made islands, or other marine structures;

(B) Technical capabilities of the individual or the primary staff to be associated with the CVA functions for the specific project;

(C) Size and type of organization or corporation;

(D) In-house availability of, or access to, appropriate technology, i.e., computer programs and hardware and testing materials and equipment;

(E) Ability to perform the CVA functions for the specific project considering current commitments; and

(F) Previous experience with MMS requirements and procedures.

(iii) The level of work to be performed by the CVA, and

(iv) A list of documents to be furnished to the CVA.

(2) *Design verification plan requirements.* The design plan shall also include the following:

(i) All design documentation specified in § 250.131(b) of this part, and

(ii) Abstracts of the computer programs used in the design process.

(3) *Fabrication verification plan requirements.* The fabrication plan shall also include fabrication drawings and